# STROPSIS

OF THE

## ARRANGEMENT

OF THE

# PREPARATIONS,

IN THE

# GALLERY

OF.

# THE MUSEUM,

OF THE

# Royal College of Surgeons.



FOR THE

## USE OF VISITORS.



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1818.

ENTERED AT STATIONERS HALL.

## VISITORS

ARE REQUESTED TO

## REFRAIN FROM TOUCHING

THE

Preparations.

# HRBEEBH

OF THE

### ROYAL COLLEGE OF SURGEONS.

#### SYNOPSIS.

THIS Synopsis corresponds entirely, in its Arrangement, with that adopted by the Founder of the Hunterian Collection, when first shewn by him to his scientific friends, in the year 1786. The additions made to the Collection, are interposed, as Donations, in the places to which, according to the Arrangement, they respectively belong, without new figures attached to them; having only red letters added to the preceding numbers.

The Collection consists of examples illustrative of the various structures of similar organs

in different plants and animals; so arranged that each set of organs forms a distinct series, or link of a chain of gradations of structure, from the most simple to the most complex.

The preparations in the gallery being all preserved in spirit, and therefore of limited size, are those only which admit of this arrangement; so as to bring into one view the whole of the different series of gradations of which the collection is composed.

In other parts of the Museum are preparations, which illustrate the different series belonging to the gallery; and which, at a future period, will have place in the general Catalogue, and, consequently, in the Synopsis.

# GALLERY.

The Collection consists of two Parts: the first Part, of preparations of those organs, which are destined for special purposes of existence, in Plants, and Animals; the second, of those for propagation of the species.

### PART I.

ORGANS, IN PLANTS, AND ANIMALS; FOR SPECIAL PURPOSES.

This Part is divided into twelve Series.

#### SERIES I.

Parts employed in Progressive Motion.

Nº 1. Productions from sap and blood, brought into one view.

- No 21. Sap, and blood; their different kinds.
  - 33. Muscular fibres; variously arranged.
  - 50. Application of Muscles.
  - 64. Elasticity, in aid of muscular action.
  - 71. Structure and growth of Shell.
  - 87. of Bone.
  - 134. \_\_\_\_\_ of the horns of the Deer.
  - 155. Process by which bones preserve their form while growing; illustrated by the results of experiments made by feeding Animals on madder.
  - 166. Cancelli in Bone.
  - 186. Structure of Tooth.
  - 187. Substances employed to sustain the soft parts, in particular animals which have no bone.
  - 194. Joints between bones; arranged in the order of complexity.
  - 241. Joints in the feet of animals.
  - 243A. Structure of the fins of Fishes.
  - 244. Feet of Animals, which demonstrate a peculiar structure.
  - 249. Elastic substance, as a substitute for muscle.

#### SERIES II.

# Organs of Digestion; and Instruments for preparing the Food.

- Nº 257. Series of different kinds of Stomach.
  - 274. Stomachs in situ.
  - 288. Œsophagus: its structure.
  - 309. Stomachs, having only one opening, through which the contents are regurgitated.
  - 314. Stomachs, consisting of one cavity and two openings; one by which the food is received, the other by which it is carried off.
  - 391. Stomachs, having a crop superadded.
  - 404. ——— having more than one cavity.
  - 417. of ruminating animals.
  - 432. Gastric glands.
  - 444. The coats of the stomach, digested, after death, by the gastric juice.
  - 449. Gizzards.
  - 464. Teeth in the stomach.
  - 473. Teeth, composed of shell.
  - 474. of horn.

No 504. Teeth, composed of bone, and enamel.

551. — of bone, enamel, and a softer kind of bone.

#### SERIES III.

Intestinal Canal; and Glands, connected with it.

579. Intestinal canal: its structure.

729. Cæcum: its structure.

740. Colon, and rectum: their structure.

775. Anal glands.

798. Liver, in situ, in different classes of animals.

807. Liver: its structure.

5. Gall-bladder and ducts.

837. Pancreas.

844. Spleen.

856. Omentum.

#### SERIES IV.

#### Absorbent Vessels.

858. Roots of plants.

859. Lacteal vessels, in animals.

885. Lymphatic vessels, and glands.

#### SERIES V.

### Heart; and Blood Vessels.

- Nº 896. Heart, in situ, in different classes of animals.
  - 909. Tubes ramifying from the alimentary canal; which, probably, perform the offices of absorbent vessels, and also of the heart and arteries.
  - 910. Heart, consisting of an artery in which the blood undulates.
  - 918. The office of the heart performed by arteries.
  - 920. The office of the heart; performed by arteries which have a communication with the veins, by means of auricles.
  - 923. Heart, consisting of two cavities.
  - 942. consisting of four cavities, the ventricles having a communication between them.
  - 947. Heart, consisting of four cavities, the Ventricles having no communication between them.
  - 959. Valves at the origin of arteries.
  - 962. Arteries.
  - 991. Veins.

#### SERIES VI.

Organs for the Aeration of the Blood.

- N° 1006. Gills, fitted for aerating the blood of animals living under water.
  - 1080. Gills, and lungs, by which the animal is fitted to live both in water and in air.
  - 1086. Lungs, fitting animals to live in air.
  - 1160. Tracheæ.

#### SERIES VII.

Organs for the Secretion of Urine.

- 1181. Kidneys, in situ, in different classes of animals.
- 1192. Kidneys: their form and structure, in the order of complexity.
- 1281. Capsulæ renales.

#### SERIES VIII.

Brain; and Spinal Marrow.

- 1294. A ganglion, from which the nerves go off, the animal not having brain.
- 1309. Brains, consisting of cerebrum and cerebellum.
- 1342. Medulla spinalis: its structure.

Nº 1376. Coverings of the brain.

1381. Nerves.

1384. Ganglions of nerves.

#### SERIES IX.

#### ORGANS of SENSE.

### 1st.—Feeling.

1389. Cutis; vascular, in the degree of its sensibility.

1411. Cutis: variety in structure.

1450. Cutis, preserved nearly 400 years.

1451. Cutis: retaining artificial marks.

#### 2d.—Taste.

1454. Tongues, of different animals; arranged according to their secondary uses.

1545. Mouth, and fauces.

#### 3d.—Smell.

1560. Nostrils, of animals not having olfactory nerves.

1565. — fitted for smelling in water.

1569. — fitted for smelling in air; in the order of complexity.

### 4th.—Hearing.

No 1593. Internal Ear, fitted for hearing in water.

air; in the order of complexity.

1639. External Ears.

#### 5th.—Vision.

1657. Eyes, adapted for seeing in water.

1725. ———— for seeing in air.

1779. — forgreat extent of vision.

1793. Eyelids.

1800. Membrana nictitans.

1803. Lachrymal gland, and ducts.

#### SERIES X.

Cellular Membrane; and Animal Oils.

1830. Cellular membrane: its structure.

1840. \_\_\_\_\_ containing Fat.

1861. Animal Oils.

1872. Adipocere: change of all the varieties of soft parts into Fat.

## SERIES XI.

## Cuticle: its different Forms.

No	1873.	Cuticular coverings of Plants.			
7.4					
	1878.	of Animals.			
	1904.	Rete-mucosum: its different colours.			
	1923.	Cuticle, in form of Hair: its growth.			
	1952.	of Bristles:			
		their growth.			
	1967.	of Feathers:			
		their growth.			
	1997.	Cuticle; lining internal cavities, and			
		excretory ducts.			
2001. Cuticle, for the defence of external					
		parts.			
	2015.	Cuticle, in form of Scales.			
		————Nails.			
	2026.				
		Beaks.			
	2040.	Spines.			
		Horns.			
	2050.	Spurs.			

#### SERIES XII.

Peculiarities in Vegetables, and Animals.

Nº 2054.	Peculiarities in Vegetables.		
2057.	Regeneration of Crustaceous cover-		
	ings, in Animals.		
2072.	cuticular coverings.		
2073.	parts of Animals.		
2091.	Peculiarities of Bones.		
2092.			
2094.	Bursæ Mucosæ.		
2096.	Substances; of which the Skeleton is		
	formed, in animals not having		
	bone.		
2104.	Peculiarities of Intestine.		
	the Arterial System.		
	the Urinary Bladder.		
	Fat, deposited in particular parts.		
	Tentacula.		
	Holders by exhausting the air.		
	Probosces.		
	Peculiarities of the Mouth.		
2123.	Whalebone, substituted for Teeth.		
2125.	Peculiarities in the colour of the Cu-		
	ticle.		
2129.	Peculiarities in the Male only.		

Nº 2133.	Glands, in Animals, for the use of in-
	ternal parts.
2146.	Glands, whose ducts open on the Face.
2155.	——————————————————————————————————————
<b>2</b> 157.	
2161.	Glands near the anus.
2172.	Glands between the toes.
2173.	Particular substances secreted by dif-
	ferent Animals.
2179.	Air bladders, for sailing.
2181.	———— for swimming.
2186.	Feet, for swimming.
2187.	Fins, for flying.
2188.	Corals, of different kinds; formed by
	Polypi, for their habitation.
2209.	Opercula.
2212.	Animals, inhabiting shells formed by
	other Animals.

2213. Instruments employed for inserting

Poisons.

2227. Electrical Organs.

## PART II.

ORGANS, IN PLANTS, AND ANIMALS, FOR PROPAGATION OF THE SPECIES.

This Part is divided into ten Series.

#### SERIES XIII.

- Organs, in Plants, and Animals, which are double; in the unimpregnated State.
- Nº 2254. Double Organs of Plants, contained in the same thalamus.
  - 2291. ———— of Plants, contained in distinct thalami.
  - 2294. ———— in Animals which impregnate themselves.
  - 2304. in Animals which have a double coitus.

#### SERIES XIV.

- Male Organs, in Plants, and Animals, of distinct Sexes.
  - 2327. Stamina of Male Plants.

Nº 2332.	Testes, and penis, in Insects.				
2371.	Testes, in Fishes.				
2392.	2. —— in Frogs, and Toads.				
2398.	Testes, and penis, in Snakes.				
2404.	in Lizards.				
2432.	———— in Testudines.				
2451.	Testes in Birds, varying in size in dif-				
	ferent seasons.				
2457.	Penis in Birds.				
2466.	Testes, in the class mammalia, varying				
	in size according to the season.				
2487.	Testes: structure.				
2497.	Penis, in the class mammalia: structure.				
2557.	Glands, whose ducts open into the				
urethra.					
SERIES XV.					
Female Organs, in Plants, and Animals, of dis-					
tinct Sexes, unimpregnated.					

2582.	Pistilla of F	'emale Plants.
2584.	Oviducts of	Vermes.
2591.		Insects.
2599.		Fishes.
2614.		Frogs, and Toads.

Nº 2617. Oviducts, of Snakes.

2620. \_\_\_\_\_ Lizards.

2627. — Testudines.

2634. ———— Birds.

2639 B. — Ornithorhynci.

2640. Ovaria, and uterus, in the class mammalia.

2718. Clitoris, in the class mammalia.

2726. Hymen, in the class mammalia.

#### SERIES XVI.

#### Coitus.

2746. Coitus: the organs double.

2755. — without insertion.

#### SERIES XVII.

Production of Young; in Plants, and Animals, with double organs.

2756A. Young, produced in Plants without evident seeds.

2757. ——— produced in Animals without evident ova.

- Nº 2762. Seeds, in plants of the class Cryptogamia.
  - 2773. ——in plants which have stamina, and pistilla, in one thalamus.
  - 2805. ——- in plants which have stamina, and pistilla, in separate thalami.
  - 2807. Ova, in Animals which impregnate themselves.
  - 2811. ———— which have a double coitus.

#### SERIES XVIII.

- Production of Young, in Animals of distinct Sexes, from Ova.
  - 2831. Ova, of Animals which deposit them, previously enclosed in a membranous nidus, in water.
  - 2836. which deposit them, previously furnished with the means of being retained in clusters, in water.
  - 2855. which pass metamorphoses before they attain perfection.
  - 2946. Metamorphoses of the Phalæna, in a regular series.

- Nº 3032. Caterpillar state, of different Insects.
  - 3062. Various kinds of Nidus, in which the changes to the Insect take place.
  - 3103. Ova of Animals, carried in the arms of the mother until hatched.
  - 3110. of Animals, carried under the tail.
  - 3121. of Fishes, shed in the form of spawn.
  - 3175. of Fishes, laid singly.
  - 3192. of Fishes, hatched in the oviduct.
  - 3201. —— of Animals, which have gills when hatched, but afterwards lungs.
  - 3216. of Snakes, hatched out of the body.
  - 3226. of Snakes, hatched in the oviduct.
  - 3237. —— of Lizards, hatched out of the body.
  - 3247. --- of Lizards, hatched in the oviduct.
  - 3270. —-- of Testudines.
  - 3278. —— of Birds, hatched under the mother.
  - 3282. Progress of the formation of the ovum, in Birds.
  - 3293. Incubation of the ovum, in Birds.

#### SERIES XIX.

# Production of Young, in Animals which have a Uterus.

- Nº 3533. Ovaria, in the class mammalia; exhibiting the changes consequent to impregnation.
  - 3373. Uteri with horns, under the changes produced by impregnation.
  - 3430. ——- without horns, in the pregnant state.
  - 3475. ——- without horns, after parturition.
  - 3485. Placenta: its structure.

#### SERIES XX.

#### Fætal Peculiarities.

- 3550. The yolk bag, and its connexion with the fœtus.
- 3598. Fætal circulation, in Birds.
- 3606. The knob upon the beak of the fœtus of Birds.

- No 3611. The yolk, received into the stomach
  - 3613. Funis umbilicalis; in the class mammalia.
  - 3620. Foramen ovale, open; in the class mammalia.
  - 3622. Ventricles of the Heart, of the same thickness.
  - 3623. Descent of the testes; in the human fætus.
  - 3625. The testes, not descended.
  - 3628. Membrana Pupillaris.
  - 3634. Thymus Gland.

#### SERIES XXI.

### Growth of Young, in Plants, and Animals.

- 3635. Young plants, from cuttings, taking root.
- **3640.** from seeds.
- 3660. Young of oviparous Animals.
- 3668. Changes of the Tadpole into the Frog.
- 3671. Young Animals, of the class mammalia.

#### SERIES XXII.

- Nourishment, and Protection, afforded by the Mother to her Young.
- N° 3707. Glandular structure in the crop of Birds; the secretion of which serves the purpose of milk.
  - 3713. Glands, which secrete milk: and nipples.
  - 3737. The young, attached under the tail of the mother.
  - 3739. ———— carried in cells, on the back.
  - 3744. \_\_\_\_\_ in a pouch on the belly.
  - 3745. upon the back.
  - 3748. ———— preserved in nests.

# CLOSET—CABINET ROOM— AND FLOOR.

In the CLOSET of the Gallery are Specimens of Monstrosity; preserved in spirit, and in a dried state.

In the Cabinet-Room are objects in Natural History: a series of extraneous Fessils: and Drawings, in Cabinets, illustrating the Design of the Collection.

On the FLOOR, in Cases, are dried preparations, explanatory of the Structure, and growth, of Teeth, and Bone—Stomachs, and Intestines—Distributions of Bloodvessels—Skeletons of Animals—and a series of Sculls; comprehending varieties in the Human Head, of natives of different Nations.

On one side of the floor is an extensive series of preparations in morbid Anatomy.

On the other side is a series of Animals, undissected; for the demonstration of their external forms, and general characters.

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